

Bibliography of Railroad Dispatcher Research

Note: The following bibliography contains scientific references to dispatcher research literature in the railroad industry, including full articles in academic journals or academic books, scientific proceedings, government reports, and other related publications. To provide updates to this document, please submit full citation information to: Pauline Easter, pauline.easter@dot.gov.

- Davis, D. R. (1958). Human error in transport accidents. *Ergonomics*, 2, 24-33.
- Devoe, D.B. (1974). *An Analysis of the Job of Railroad Train Dispatcher*. (Report No. FRA-PRD&D-74-37). Washington, DC: Federal Railroad Administration.
- Edkins, G. D., & Pollock, C.M. (1997). The influence of sustained attention on railway accidents. *Accident Analysis and Prevention*, 29(4), 533-539.
- Federal Railroad Administration. (1990). *National Train Dispatching Safety Assessment*. Washington, DC: U.S. Department of Transportation.
- Federal Railroad Administration. (1995). *National Train Dispatcher's Follow-up Review*. Washington, DC: U.S. Department of Transportation.
- Gertler, J., & Acton, S. (2003). *Railroad Dispatcher Communications Training Materials*. (Report No. DOT/FRA/ORD-03/12). Washington, DC: Federal Railroad Administration.
- Gertler, J. (2003). *Selection of Railroad Dispatcher Candidates*. (Report No. DOT/FRA/ORD-03-09). Washington, DC: Federal Railroad Administration.
- Gertler, J., & Nash, D. (2004). *Optimizing Staffing Levels and Schedules for Railroad Dispatching Centers*. (Report No. DOT/FRA/ORD-04/01). Washington, DC: Federal Railroad Administration.
- Gertler, J., & Viale, A. (2007). *Work Schedules and Sleep Patterns of Railroad Dispatchers*. (Report No. DOT/FRA/ORD-07/11). Washington, DC: Federal Railroad Administration.
- Grant, J. S. (1971). Concepts of fatigue and vigilance in relation to railway operations. *Ergonomics*, 14(1), 111-118.
- Hak, A. & Kampman, R. (1981). Working irregular hours: Complaints and state of fitness of railway personnel. In A. Reinberg, N. Vieux & P. Andlauer (Eds.) *Night and Shift Work: Biological and Social Aspects* (pp. 229-236). Rouen: Pergamon Press.
- Kolmodin-Hedman, B., & Swensson, A. (1975). Problems related to shift work: A field study of Swedish railroad workers with irregular work hours. *Scandinavian Journal of Work, Environment and Health*, 1, 254-262.
- Komaya, K., & Asuka, M. (2001). Rail traffic control under disrupted conditions. *Control in Transportation Systems 2000: A Proceedings Volume from the 9th IFAC Symposium*, Braunschweig, Germany, 13-15 June 2000.

- Kvist, T., Hellstrom, P., Sandclad, B., & Bystrom, J. (2002). Decision support in the train dispatching process. *Eight International Conference on Computers in Railways VIII*. Lemnos, Greece, 12-14 June 2002.
- Lambropoulos, T. (2002). Genetic algorithm application for the solution of the optimal dispatching problem. *Eight International Conference on Computers in Railways VIII*. Lemnos, Greece, 12-14 June 2002.
- Lauber, J. K. & Kayten, P. J. (1988). Sleepiness, circadian dysrhythmia, and fatigue in transportation system accidents. *Sleep*, 11(6), 503-512.
- Lenior, T. M. J. (1993). Analysis of cognitive processes in train traffic control. *Ergonomics*, 36 (11), 1361-1368.
- Malsch, N., Sheridan, T., & Multer, J. (2004). *Impact of Data Link Technology on Railroad Dispatching Operations*. (Report No. DOT/FRA/ORD-04/11) Washington, DC: Federal Railroad Administration.
- Masquelier, T., Sheridan, T., & Multer, J. (2004). *Supporting Railroad Roadway Worker Communications with a Wireless Handheld Computer: Volume 2: Impact on Dispatcher Performance*. (Report No. DOT/FRA/ORD-04/13.II) Washington, DC: Federal Railroad Administration
- McCord, C.P. (1948). Life and death by the minute. *Industrial Medicine*. 17 (10), 377-382.
- Pickup, L., Wilson, J.R., & Clarke, T. Mental workload of the railway signaller. In Paul T. McCabe (ed) Contemporary Ergonomics 2003. *Proceedings from the Ergonomics Society Conference*. Edinburgh: Taylor & Francis, 397-402, 2003.
- Popkin, S., Gertler, J., & Reinach, S. (2001). *A Preliminary Examination of Railroad Dispatcher Workload, Stress, and Fatigue*. (Report No. DOT/FRA/ORD-01-08). Washington, DC: Federal Railroad Administration.
- Reinach, S. (2007). *Preliminary development of a railroad dispatcher taskload assessment tool: identification of dispatcher tasks and data collection methods*. (DOT/FRA/ORD-07/13). Washington, DC: Federal Railroad Administration.
- Reinach, S. (2006). Toward the development of a performance model of railroad dispatching. In *Proceedings of the Human Factors and Ergonomics Society 50th Annual Meeting*. Santa Monica: Human Factors and Ergonomics Society. pp. 2042-2046.
- Reinach, S., Gertler, J., & Kuehn, G. (1998). *Training Requirements for Railroad Dispatchers: Objectives, Syllabi, and Test Design*. (Report No. DOT/FRA/ORD-98-08). Washington, DC: Federal Railroad Administration.
- Rondon, M., & Gomide, F. (2001). Line block analysis in railway dispatch and simulation systems. *Control in Transportation Systems 2000: A Proceedings Volume from the 9th IFAC Symposium*, Braunschweig, Germany, 13-15 June 2000.
- Roth, E., Malsch, N., & Multer, J. (2001). *Understanding How Train Dispatchers Manage and Control Trains: Results of a Cognitive Task Analysis*. (Report No. DOT/FRA/ORD-01/02). Washington, DC: Federal Railroad Administration.

- Roth, E., Malsch, N., Multer, J., and Coplen, M. (1999). Understanding How Railroad Dispatchers Manage and Control Trains: A Cognitive Task Analysis of a Distributed Team Planning Task. In *Proceedings of the Human Factors and Ergonomics Society 43rd Annual Meeting*. Houston, TX:Human Factors and Ergonomics Society.
- Sandblad, B., Andersson, A., Jonsson, K. E., Hellstrom, P., Lindstrom, P., Rudolf, J., Storck, J., & Wahlborg, M. (2000). A train traffic operation and planning simulator. *Seventh International Conference on Computers in Railways. Computers in Railways VII*. Bologna, Italy 11-13 September 2000.
- Skjerve, A. B., Ludvigsen, J., & Neset, T. (2002) *Identification of qualifications for train-dispatcher trainees*. Halden, Norway: Institute for Energy Technology.
- Vanderhorst, J. (1990). *A comparison of voice and data link communication: Railroad dispatcher's perspective*. (Report No. PB91-130021INZ). Washington, DC: Federal Railroad Administration.